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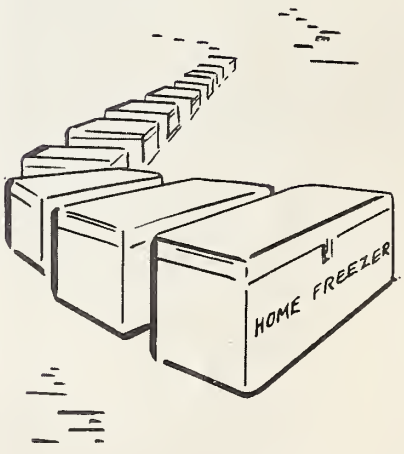
Merchandising Frozen Food by Locker and Freezer Provisioning Plants

BY BERT D. MINER

FARMER COOPERATIVE SERVICE
U. S. DEPARTMENT OF AGRICULTURE



FARMER COOPERATIVE SERVICE
U. S. DEPARTMENT OF AGRICULTURE
WASHINGTON 25, D. C.

Joseph G. Knapp, Administrator

The Farmer Cooperative Service conducts research studies and service activities of assistance to farmers in connection with cooperatives engaged in marketing farm products, purchasing farm supplies, and supplying business services. The work of the Service relates to problems of management, organization, policies, merchandising, product quality, costs, efficiency, financing, and membership.

The Service publishes the results of such studies, confers and advises with officials of farmer cooperatives; and works with educational agencies, cooperatives, and others in the dissemination of information relating to cooperative principles and practices.

This study was conducted under authority of the Agricultural Marketing Act of 1946 (RMA, Title II).

Contents

	Page
Summary and findings	iii
Home freezer suppliers	2
Types of businesses	2
Location of plants	3
Merchandising operations	5
Products handled	7
Services offered	15
Membership fees charged	20
Some business indicators	21
Home freezer patrons	21
Annual sales	21
Comparison between plants selling and those not selling home freezers	27
Comparison between financing and non-financing plants	28
Observations and conclusions	29

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Summary and Findings

A new method of food distribution has developed with the advent of home freezers. This method entails selling bulk quantities of frozen food directly to consumers, often on a financed basis, and is known as freezer provisioning.

Freezer provisioning began in the mid-1940's and has grown considerably since then. The locker and freezer provisioning industry is probably the most important group of businesses supplying bulk quantities of frozen food to home freezer owners.

In a study made by Farmer Cooperative Service, a total of 2,546 locker and food provisioning establishments which comprised about one-fourth of the industry received questionnaires. They were selected because of their merchandising operations. The study put emphasis on determining factors influencing the success of their business activities. A total of 1,433 establishments, including cooperatives, returned useable questionnaires giving data on their 1957 operations. These formed the basis for this report. While the major findings listed below were based on the 1,433 useable questionnaires, the first three were projected to include all 2,546 plants to which questionnaires were mailed.

- Plants served an estimated 1.6 million home freezer customers.

- They sold about 165,000 home freezers.

- Projected total sales were nearly $400 million.

- Average annual sales per plant were $156,000 and almost two-fifths of the plants had annual sales of $100,000 or more.

- Plants in the North Atlantic Region and the South Atlantic Region had larger average sales than plants in other regions.

- Plants located in bigger towns had larger average sales than plants in smaller towns.

- Those plants with larger average sales were the same ones that performed more of the various merchandising operations, especially those more directly associated with serving home freezer owners, such as financing bulk food purchases, selling home freezers, providing delivery service, and employing home economists.

- Frozen food locker plants, comprising three-fourths of the plants studied, accounted for about 56 percent of estimated total sales. Independent freezer provisioning plants comprising about 8 percent of the total accounted for about 23 percent. The remaining 21 percent of total sales were accounted for by freezer provisioning through retail grocery stores, wholesale meat companies,

frozen food distributors, and a miscellaneous group of firms.

- About three-fifths of the meat and commercial frozen food was sold in bulk quantities to home freezer customers.

- Meat sales accounted for approximately 60 percent of total sales.

- Average total sales were almost two and a half times as large for plants selling home freezers as for those not selling them.

- Bulk meat sales were half again as large for plants financing food as for those not financing it. Commercial frozen food sales by plants financing food were more than five times as great as for those not financing.

- Locker and freezer provisioning establishments provided an important service to home freezer owners.

Merchandising Frozen Food by Locker and Freezer Provisioning Plants

By Bert D. Miner
Frozen Food Locker Branch
Purchasing Division

The advent of home freezers paved the way for a new and imaginative method of food distribution -- bulk quantities of frozen food sold directly to consumers, often on a financed basis. To the public, this method is generally known as a food plan. To many in the business, it is known as freezer provisioning.

The locker and freezer provisioning industry has been particularly active in this new method of food distribution having pioneered it over 10 years ago. Major growth of the industry has come in the last 4 or 5 years.

Many farmers, through their frozen food locker cooperatives, can benefit from freezer provisioning. First, the increased volume of business would allow more efficient use of plant, equipment, and personnel. Second, the expanded volume of products handled would greatly improve locker plants as market outlets for locally produced products. Third, as consumers, farmers would be able to enjoy the convenience of these additional services. Fourth, financial benefits would accrue to farmers as owners of these cooperative business ventures.

Farmer Cooperative Service of the U. S. Department of Agriculture undertook this study of factors influencing success of frozen food locker merchandising because of the expected benefits which could accrue to farmers and consumers.

Plants included in the study were selected from a 1955 industry survey by Farmer Cooperative Service and from various trade sources. Selected plants had annual sales of $25,000 or more or financed food sales for over 60 days and as such formed the upper one-fourth of the industry. Findings of this study were based on information about 1957 operations provided by 1,433 establishments that returned useable questionnaires. In most cases data were not projected for the entire industry. In the few places where totals were projected, the estimates were only for the 2,546 plants that received questionnaires.

Note: Appreciation is expressed to all the operators who returned questionnaires and thus made this study possible. This study was undertaken at the request of the locker and freezer provisioning industry. The author acknowledges the assistance of Robert Madeira of the National Institute of Locker and Freezer Provisioners and Albert Todoroff of the magazine, Freezer Provisioning, in providing information on plant location and soliciting the cooperation of operators. Particular mention is made of the pictures furnished by Freezer Provisioning.

Home Freezer Suppliers

The introduction of home freezers in the mid-1940's offered homemakers a convenient home storage unit for frozen foods. Some forward-looking businessmen soon recognized that a home freezer without an adequate food source was no bargain. Realizing this, they added freezer provisioning to their existing businesses.

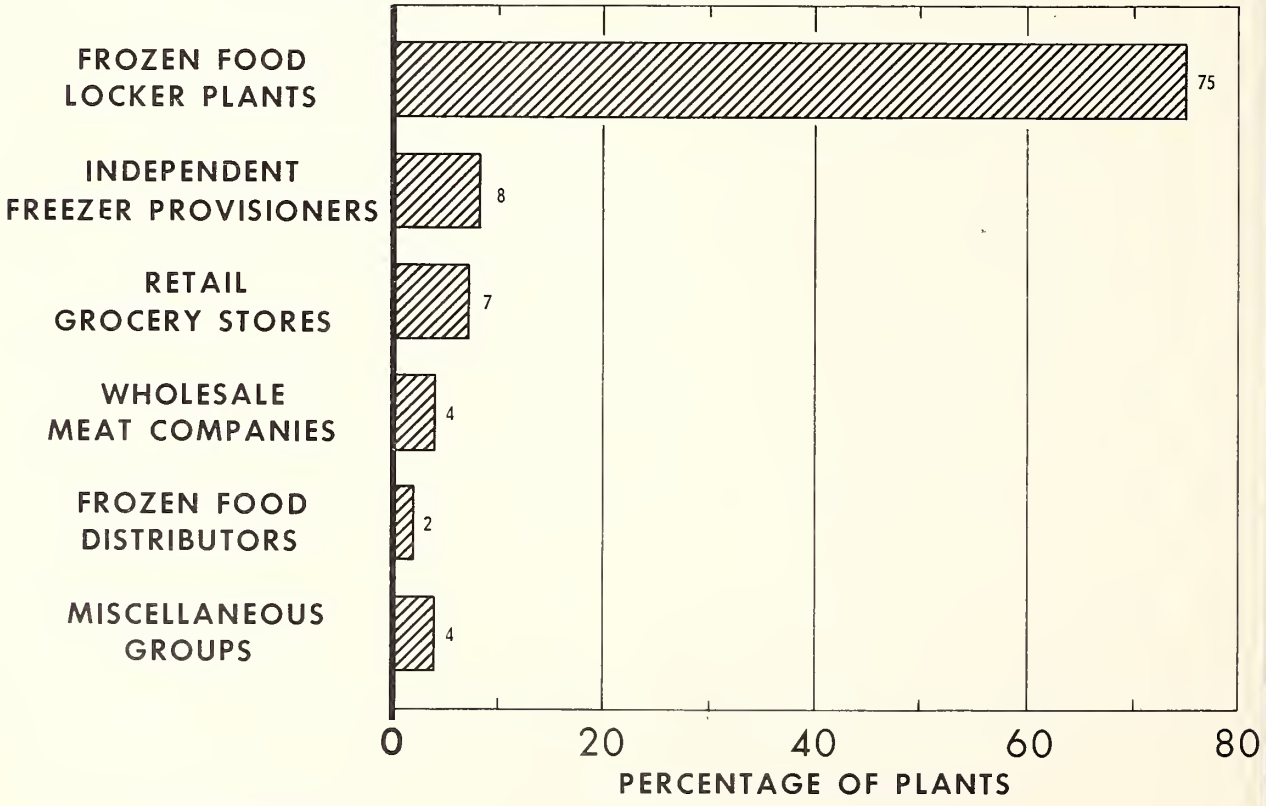
Types of Businesses

Figure 1 shows the composition of the establishments studied by types of businesses supplying bulk quantities of frozen food for home freezers. Frozen food locker plants accounted for 75 percent of the total. These plants started performing the same services for home freezer owners they had been accustomed to performing for their locker patrons. The expansion of these services seldom required any major expenditures for new facilities or equipment, and changes in operation, at least initially, were minor.

Other businesses entering this field usually had to provide facilities and equipment in addition to developing a new method of operation to meet the needs of potential customers. In this group were some retail grocery stores, wholesale meat companies, frozen food distributors, and some miscellaneous firms. In total these accounted for 17

Figure 1

Who Supplied Food for Home Freezers ?



1957 DATA FROM 1,433 SELECTED PLANTS

A typical home freezer provisioning plant.

percent of the establishments surveyed.

Another group of plants called independent freezer provisioners accounted for about 8 percent. They were given this name because they were organized primarily as purveyors of bulk quantities of frozen foods to home freezer owners rather than adapting this service to already existing businesses.

Location of Plants

The regional locations of plants providing information for this survey appear in figure 2.

Plants in the North Central Region accounted for 45 percent of the total. This concentration should be expected since a 1955 survey of the frozen food locker industry showed that about 53 percent of all such plants were located in this region.

Proportionally the percentage of plants in this survey falling within the North Central and the Pacific Regions was smaller than in the 1955 industry survey. It was greater for the North Atlantic and the South Atlantic Regions. Plants reporting from the South Central and the Mountain Regions accounted for about the same proportion of the total in both surveys.

While data on regional location of freezer provisioners helped visualize the distribution of such firms, data on location by size of town were more revealing. A comparison of this nature between establishments in this study and those in a 1955 industrywide survey showed a greater proportion of firms in this study in larger-size towns than the 1955 survey showed. In the latter study about 29 percent were in towns of over 10,000 population as compared with approximately 42 percent in this study. Also, the size of the freezer provisioning program was usually greater in plants located in larger-size towns.

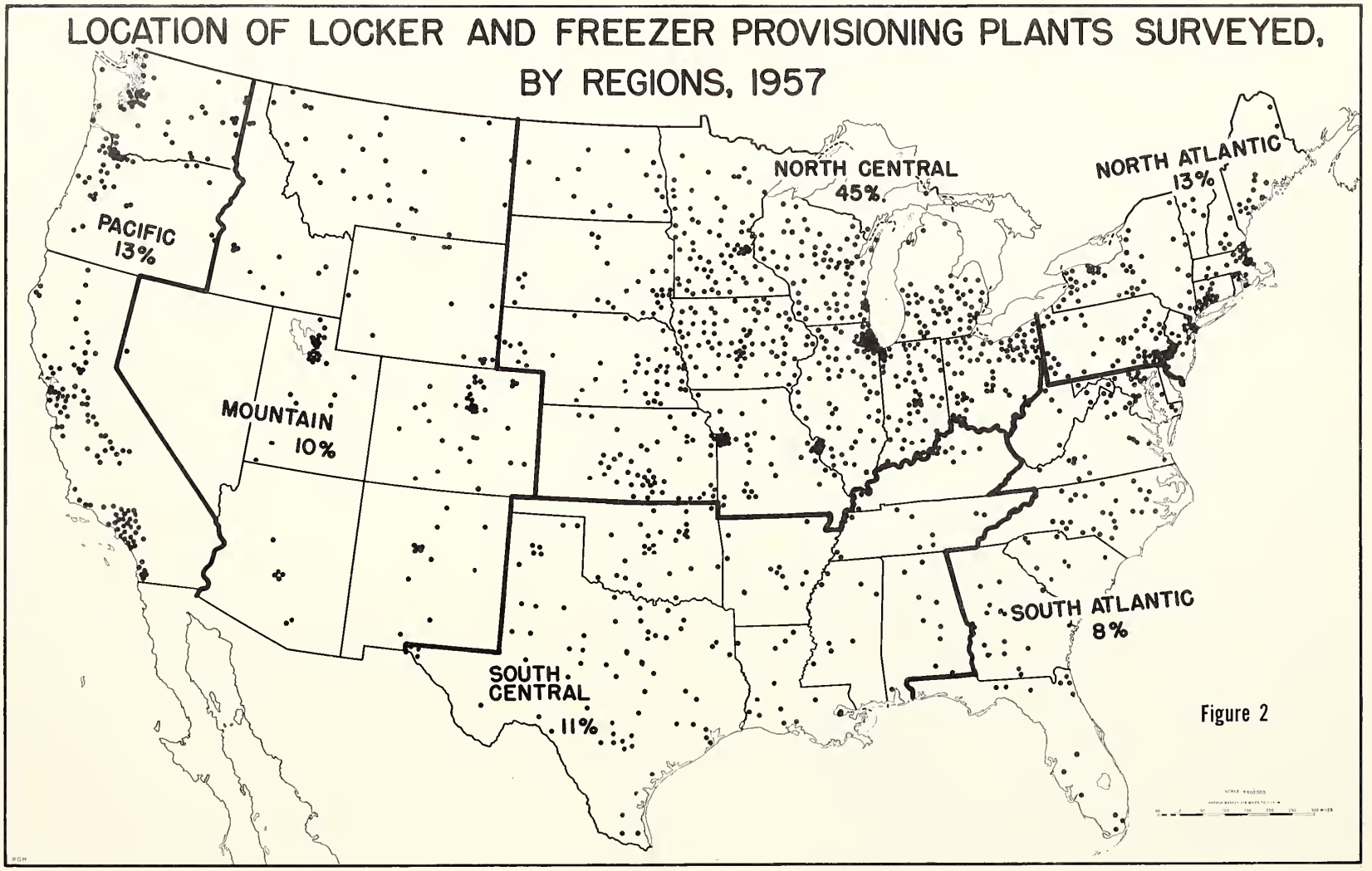

LOCATION OF LOCKER AND FREEZER PROVISIONING PLANTS SURVEYED, BY REGIONS, 1957
PACIFIC 13%
MOUNTAIN 10%
NORTH CENTRAL 45%
NORTH ATLANTIC 13%
SOUTH ATLANTIC 8%
SOUTH CENTRAL 11%

Figure 2

This relationship is explained partially by the more limited market potential for this type of merchandising program in smaller communities. The market potential is limited because of fewer families and because more of these families produce a greater proportion of their own food supply with the result that they are chiefly interested in the custom services offered by locker and freezer provisioners.

Since the size of the town has a definite effect on the type of freezer provisioning program, it is valuable to know the percentage of plants reporting by size of town within regions (table 1). This helps show size-of-town influence on regional statistics. These data also show that freezer provisioning can be undertaken by plants located in smaller communities, although probably on a more limited basis.

Table 1. - *Percentage of plants reporting by size of town, 1957*

Region	Population of town						
	Under 2,000	2,000-4,999	5,000-9,999	10,000-24,999	25,000-99,999	100,000 and over	Total
	Percent						
North Atlantic	20	12	17	15	15	21	100
South Atlantic	13	18	10	16	24	19	100
North Central	42	16	10	9	9	14	100
South Central	16	17	14	16	14	23	100
Mountain	36	15	8	11	17	13	100
Pacific	24	19	9	15	13	20	100
United States	31	16	11	12	13	17	100

Merchandising Operations

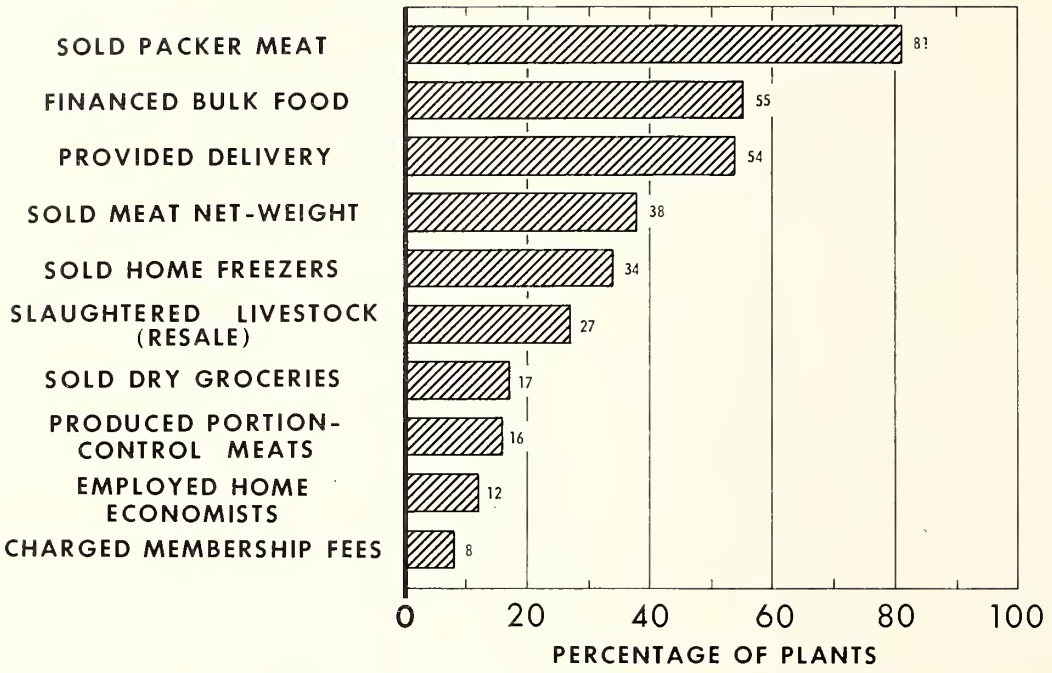
Merchandising has become increasingly more important in operating a locker and freezer provisioning plant over the past 10 years. The general availability of food through several channels, the decline in demand for locker storage space, the rapidly expanded use of home freezers, and the consumer's desire for convenience, among other things, have all lent emphasis to the need for more effective merchandising.

Figure 3 lists some merchandising operations being performed by the plants providing information for this study. It also points out the proportion of plants performing each specified operation. Generally speaking, there was a close relationship between the proportion of plants performing a specific merchandising operation and how long ago that operation was introduced into the industry. An exception would be slaughtering livestock for resale.

In the following pages each merchandising operation specified in figure 3 will be discussed in more detail. Each is tabulated on three bases to allow examination of different relationships. The bases are region, size of town, and type of business affiliation.

Figure 3

Merchandising Operations Performed



1957 DATA FROM 1,433 SELECTED PLANTS

Distribution of locker and freezer provisioning plants, by region, follows:

Region	Plants reporting
North Atlantic	189
South Atlantic	108
North Central	655
South Central	156
Mountain	137
Pacific	188
Total	1,433

Number of establishments, by size of town, follows:

Size of town	Plants reporting
Under 2,000	447
2,000-4,999	228
5,000-9,999	160
10,000-24,999	174
25,000-99,999	187
100,000 and over	237
Total	1,433

Distribution of firms, by type of business affiliation, follows:

Type of business affiliation	Plants reporting
Frozen food locker plant	1,075
Retail grocery store	100
Wholesale meat company	57
Wholesale frozen food distributor	29
Independent freezer provisioner	115
Miscellaneous group	57
Total	1,433

The following text material is intended to augment the statistical information and help explain some of the more important relationships. Discussion of the 10 merchandising operations shown in figure 3 is grouped under three major headings - products handled, services offered, and membership fees charged.

Products Handled

Of the 10 merchandising operations, 6 come under this heading. The products handled were as follows: Packer meat, net-weight meat, home freezers, livestock slaughtered for resale, dry groceries, and portion-control meats.

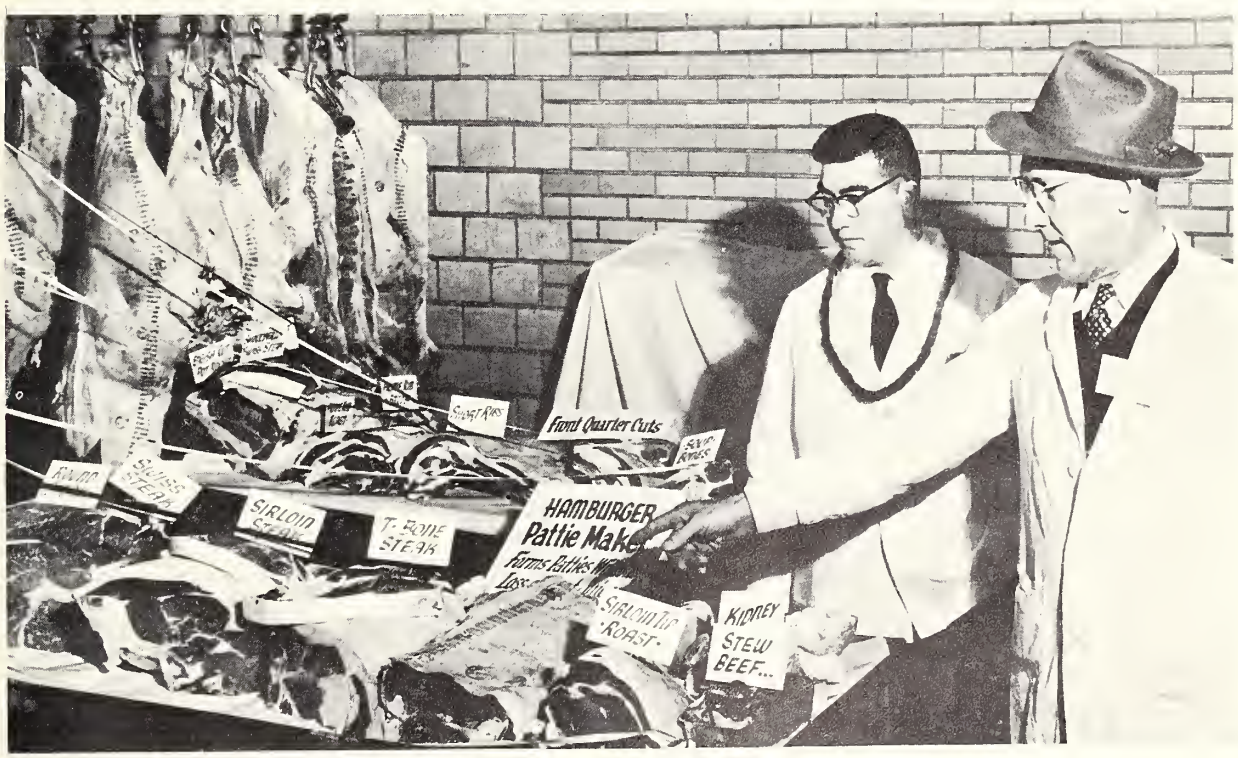
Packer Meat

Over four-fifths of the establishments studied bought packer meat for resale. This was necessary for those without their own slaughtering facilities or access to custom slaughtering facilities if they wanted to sell meat. Only 3 percent indicated they sold no meat and many of these were department stores and appliance dealers.

One reason advanced by plant representatives for using packer meat was that it had been federally inspected and graded. As merchandising has become more and more impersonal, many consumers have come to rely upon federally inspected and graded products. They have found it easier and less time consuming to depend upon these symbols of quality than to learn to inspect and grade products for themselves. Many freezer provisioners seek to capitalize on this attitude of consumers by handling packer meat and other federally inspected and graded products.

The percentage of plants selling packer meat, by region, in 1957 follows:

Region	Percentage selling packer meat
North Atlantic	86
South Atlantic	86
North Central	80
South Central	73
Mountain	79
Pacific	86
Average	81



A display showing different cuts of beef and where in a side they come from.

Furthermore, some plant managers preferred to sell packer meat because they did not have to invest in slaughtering facilities and equipment nor spread their managerial talent over this additional operation. Others were discouraged from operating their own slaughtering facilities because of local ordinances, zoning regulations, sanitation restrictions, and other legal and institutional reasons.

The percentage of plants selling packer meat, by size of town, in 1957 follows:

Size of town	Percentage selling packer meat
Under 2,000	76
2,000-4,999	80
5,000-9,999	80
10,000-24,999	84
25,000-99,999	94
100,000 and over	79
Average	81

The increase in number of plants selling packer meat paralleled to a great extent the growth in home freezer provisioning. Before the introduction of home freezers in the mid-1940's, few locker plants sold packer meat. In fact, few of them sold anything except packaging supplies, and even with those that did, the volume was small. Primary emphasis was upon custom processing and locker rentals.

Changing times, however, have necessitated changes in operations. Of all the locker plants in this study, 84 percent sold packer meat. Even a larger proportion, 92 percent, of the independent freezer provisioners sold it.

The percentage of plants selling packer meat, by type of business affiliation, in 1957 follows:

Type of business affiliation	Percentage selling packer meat
Frozen food locker plant	84
Retail grocery store	78
Wholesale meat company	70
Wholesale frozen food distributor	79
Independent freezer provisioner	92
Miscellaneous group	34
Average	81

Net-Weight Meat

Almost 40 percent of the plants sold meat on a net-weight basis. This meant animal carcasses were broken down and fabricated into retail cuts prior to being weighed and sold to customers.

Following is the percentage of plants selling net-weight meat, by region, in 1957:

Region	Percentage selling net-weight meat
North Atlantic	43
South Atlantic	29
North Central	40
South Central	40
Mountain	42
Pacific	32
Average	38

The South Atlantic and the Pacific Regions showed the greater deviation from the average for all regions. Likewise, a smaller proportion of the plants located in towns of 10,000 to 24,999 sold meat on a net-weight basis. The data do not suggest any explanations for these deviations. They probably resulted because of the strong personal preferences of some freezer provisioners or owners.

Meat being cut, weighed, packaged, marked, and frozen prior to sale.

The percentage of plants selling net-weight meat, by size of town, in 1957 follows:

Size of town	Percentage selling net-weight meat
Under 2,000	40
2,000-4,999	39
5,000-9,999	41
10,000-24,999	33
25,000-99,999	38
100,000 and over	38
Average	38

The majority of plants preferred to sell meat on a gross-weight basis; that is, sell meat to customers in sides, split sides, quarters, or some other similar weight-basis and then process it according to the customer's direction. Many freezer provisioners consider this a necessary personalized service to assure customer confidence and patronage.

Following is the percentage of plants selling net-weight meat, by type of business affiliation, in 1957:

Type of business affiliation	Percentage selling net-weight meat
Frozen food locker plant	38
Retail grocery store	45
Wholesale meat company	49
Wholesale frozen food distributor	29
Independent freezer provisioner	45
Miscellaneous group	29
Average	38

Home Freezers

About one-third of the firms sold home freezers. The largest proportion were in the South Atlantic Region although

it was the last to move into this area of merchandising. In the North Atlantic Region a relatively large proportion of the plants also sold home freezers.

The percentage of plants selling home freezers, by region, in 1957 follows:

Region	Percentage selling home freezers
North Atlantic	49
South Atlantic	54
North Central	28
South Central	39
Mountain	26
Pacific	31
Average	34

The proportion selling home freezers increased as size of town increased. This is partly because of the larger potential market. There is an inclination among people to travel greater distances to buy home appliances than they will to buy food.

The percentage of plants selling home freezers, by size of town, in 1957 follows:

Size of town	Percentage selling home freezers
Under 2,000	17
2,000-4,999	23
5,000-9,999	32
10,000-24,999	38
25,000-99,999	52
100,000 and over	62
Average	34

The inclination to "shop" for home freezers is explained by the frequent but smaller dollar expenditures for food as compared with less frequent but larger dollar expenditures for home appliances. Because of this tendency, purchase of a home freezer becomes a family decision and justifies more extensive and intensive shopping or consideration before the unit is bought.

The foregoing facts are based on fundamental marketing psychology that freezer provisioning establishments, especially those located in small towns, should examine prior to launching a line of home freezers. These facts, of course, are not the sole criteria. Other factors should be considered, also. In some cases there may be counteracting influences that would more than offset these basic tendencies. Some of these influences, to name a few, might be time available for shopping, distance from the dealer, and confidence in him.

Following is the percentage of plants selling home freezers by type of business affiliation, in 1957:

Type of business affiliation	Percentage selling home freezers
Frozen food locker plant	28
Retail grocery store	13
Wholesale meat company	33
Wholesale frozen food distributor	62
Independent freezer provisioner	93
Miscellaneous group	83
Average	34

Time and distance are more difficult to evaluate than confidence. People prefer to patronize establishments in which they have confidence. Once they find such a place they will very likely continue patronizing it, with price becoming a secondary consideration. In fact, they are often willing to pay slightly higher prices for this establishment's products so long as their confidence is not shaken.

Customer confidence helps explain why some establishments remain in business when few other economic factors favor their continued existence. Freezer provisioners should remember

Table 2. - *Number of plants, by region, and percentage of plants, by region and indicated years of selling home freezers, 1957*

Region	Plants reporting	Years of selling home freezers		
		1 - 4	5 - 8	9 or more
	Number	*Percent*		
North Atlantic	93	40	39	21
South Atlantic	58	70	18	12
North Central	184	45	40	15
South Central	61	60	25	15
Mountain	36	30	50	20
Pacific	58	37	35	28
Total or average	490	47	35	18

that in the final analysis number and loyalty of consumers determine which plants will remain in business.

Almost half the plants selling home freezers had been doing so from 1 to 4 years. This varied by region and size of town (tables 2 and 3). The Pacific Region showed the largest percentage that had been in the business of selling home freezers for 9 or more years. This is explainable by the fact that plants in this region were among the first to sell home freezers and stock them with frozen foods.

It appeared that plants located in smaller towns were among the first to sell home freezers. The number from these towns selling freezers for 9 or more years was relatively greater than the average for all towns.

Livestock Slaughtered for Resale

Of all plants surveyed, 27 percent purchased livestock and slaughtered them for sale. The percentage performing this operation varied by region and size of town. In the North Atlantic and the Pacific Regions less than one-tenth slaughtered livestock for resale. This may be partially because the plants reporting from those regions were concentrated in the large population centers while firms reporting from other regions were dispersed.

Table 3. - *Number of plants, by size of town, and percentage of plants, by size of town and indicated years of selling home freezers, 1957*

Size of town	Plants reporting	Years of selling home freezers		
		1 - 4	5 - 8	9 or more
	Number	*Percent*		
Under 2,000	73	42	36	22
2,000-4,999	54	44	30	26
5,000-9,999	54	46	28	26
10,000-24,999	64	56	27	17
25,000-99,999	98	50	41	9
100,000 and over	147	44	40	16
Total or average	490	47	35	18

A freezer provisioner demonstrating a home freezer to a potential customer.

The percentage of plants slaughtering livestock for sale, by region, in 1957 follows:

Region	Percentage slaughtering livestock for sale
North Atlantic	8
South Atlantic	31
North Central	36
South Central	38
Mountain	25
Pacific	7
Average	27

The data showed that in larger-size towns a smaller proportion of the establishments bought and slaughtered livestock for sale. This relationship was expected because of the generally more restrictive local ordinances, regulations, and other institutional factors covering construction and operation of abattoirs in larger towns.

Another factor could be described as the influence of farmers and other rural people who raised some livestock for their own use. Because of this, many plants in rural communities found it advantageous to offer custom slaughtering and processing services. Farmers who had initially done these tasks themselves often turned the job over to custom operators who were more skilled and had more adequate and more sanitary facilities.

Following is the percentage of plants slaughtering livestock for sale, by size of town, in 1957:

Size of town	Percentage slaughtering livestock for sale
Under 2,000	42
2,000-4,999	38
5,000-9,999	32
10,000-24,999	21
25,000-99,999	10
100,000 and over	6
Average	27

Later, establishments seeking efficient use of their slaughter facilities and equipment began buying and slaughtering livestock for sale to retail grocery stores, restaurants, hospitals, schools, and other institutions as well as locker and home freezer patrons.

The transition from custom slaughtering to slaughtering for sale, or a combination of the two, was important for all establishments performing this service in that they served as another market outlet for livestock. In this respect, a farmer cooperative can offer its members three distinct benefits: (1) Serve as another market outlet for their livestock, (2) provide them with high-quality frozen foods, and (3) return the savings to them as owners.

Following is the percentage of plants slaughtering livestock for sale, by type of business affiliation, in 1957:

Type of business affiliation	Percentage slaughtering livestock for sale
Frozen food locker plant	32
Retail grocery store	10
Wholesale meat company	19
Wholesale frozen food distributor	0
Independent freezer provisioner	6
Miscellaneous group	5
Average	27

The main reason so many locker plants bought and slaughtered livestock for sale was to more efficiently use their existing slaughter facilities and equipment. They gradually moved into slaughtering for sale as they increased their merchandising business.

Dry Groceries

Seventeen percent of the establishments surveyed included dry groceries in their freezer provisioning program. The Mountain Region showed the greatest proportion offering this service followed closely by the North Atlantic Region. The South Central Region showed the smallest percentage engaging in supplying these items.

The percentage of plants selling dry groceries, by region, in 1957 follows:

Region	Percentage selling dry groceries
North Atlantic	21
South Atlantic	9
North Central	19
South Central	6
Mountain	22
Pacific	15
Average	17

There may be two different reasons why such a large proportion of the establishments included dry groceries in their freezer provisioning program. First, retail grocery stores already had dry groceries available; therefore when they branched out into freezer provisioning, they simply brought dry groceries into the program. Second, some locker plants that operated a retail grocery business in conjunction with their locker business followed a similar course of action.

This would explain the unexpectedly large percentage of firms in smaller

Dry groceries or staples are sometimes included in the freezer provisioning program.

towns offering this service. It would also help explain the percentage by regions. A large portion of the plants reporting from the Mountain, the North Central, and the Pacific Regions were located in small towns.

The percentage of plants selling dry groceries, by size of town, in 1957 follows:

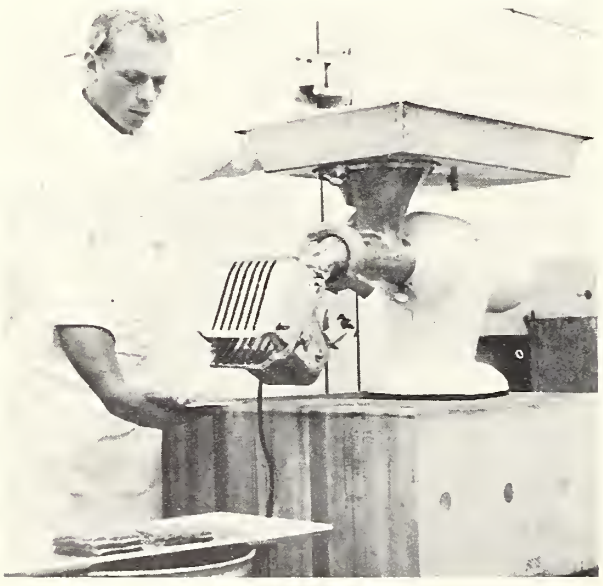
Region	Percentage selling dry groceries
Under 2,000	22
2,000-4,999	12
5,000-9,999	15
10,000-24,999	15
25,000-99,999	14
100,000 and over	16
Average	17

On the other hand, a relatively large share of the establishments reporting from the North Atlantic Region incorporated dry groceries into their freezer provisioning program. The major reason for this was the independent freezer provisioners. These operations would also help explain the percentage by size of town. They were primarily located in the larger population centers.

Following is the percentage of plants selling dry groceries, by type of business affiliation, in 1957:

Type of business affiliation	Percentage selling dry groceries
Frozen food locker plant	16
Retail grocery store	28
Wholesale meat company	7
Wholesale frozen food distributor	8
Independent freezer provisioner	19
Miscellaneous group	8
Average	17

When dry groceries were included in the freezer provisioning program, it was done to build business volume through an added convenience inducement to customers.



Beef patties are one of the more common portion-control meats. Others include various steaks, steakettes, and chopettes.

Portion-Control Meats

Sixteen percent of the organizations studied produced portion-control meats. These are individual meat servings of equal weight, which are expecially adapted to the institutional trade such as restaurants, hospitals, schools, and so forth.

The percentage of plants producing portion-control meats, by region, in 1957 follows:

Region	Percentage producing portion-control meats
North Atlantic	22
South Atlantic	19
North Central	16
South Central	16
Mountain	11
Pacific	9
Average	16

The data indicated that establishments located in larger towns, especially in the North Atlantic and the South Atlantic Regions, showed a greater proportionate response to this method of meat merchandising than others. The greater market potential for this specialized service in larger towns probably explains why plants in these areas have incorporated it into their operations.

Following is the percentage of plants producing portion-control meats, by size of town, in 1957:

Size of town	Percentage producing portion-control meats
Under 2,000	10
2,000-4,999	11
5,000-9,999	22
10,000-24,999	16
25,000-99,999	17
100,000 and over	26
Average	16

Proportionally, wholesale frozen food distributors and wholesale meat companies showed more plants producing portion-control meats. This would be expected since they cater more to the institutional trade.

The percentage of plants producing portion-control meats, by type of business affiliation, in 1957 follows:

Type of business affiliation	Percentage producing portion-control meats
Frozen food locker plant	14
Retail grocery store	16
Wholesale meat company	35
Wholesale frozen food distributor	38
Independent freezer provisioner	18
Miscellaneous group	8
Average	16

Portion-control meats are relatively new but already there are some companies that have specialized in them. Available information indicates that portion-control meats will become even more popular both with the institutional trade and with home freezer owners.

Services Offered

Three merchandising operations were grouped under this heading. They appear in the following sequence: Financing for bulk food purchases, delivery service, and advice from home economists.

Financing for Bulk Food Purchases

Over half of the locker and freezer provisioning firms reported that they financed or arranged financing for 60 days or more for customers to purchase food in large quantities. While some retail grocery stores have sold food on credit or a charge basis for years, the trend in recent years has been toward cash sales, especially in supermarkets.

Within the past 15 years, financing has been adapted to another segment of the food industry -- home freezer provisioning. When people began buying home freezers, they soon discovered the need for relatively large quantities of food to stock them. Not all families were financially able to pay from $100 to $300 cash in exchange for a freezer full of food.

Some alert businessmen were quick to grasp this opportunity to perform another customer service and at the same time increase their business. The types of financing arrangements offered varied from plant to plant.

Of the plants reporting, those in the North Atlantic Region showed the largest proportion financing bulk food purchases. This is partly explained by the relatively greater number of large population centers.

A freezer provisioning establishment offering complete family food service including financing.

Following is the percentage of plants financing bulk food purchases, by region, in 1957:

Region	Percentage financing bulk food
North Atlantic	74
South Atlantic	65
North Central	48
South Central	60
Mountain	47
Pacific	58
Average	55

Those regions that had more plants located in smaller towns also reported a smaller proportion of plants financing bulk food purchases for 60 days or more.

The percentage of plants financing bulk food purchases, by size of town, in 1957 follows:

Size of town	Percentage financing bulk food
Under 2,000	36
2,000-4,999	45
5,000-9,999	54
10,000-24,999	67
25,000-99,999	76
100,000 and over	77
Average	55

Generally, the larger the population of a town the greater the proportion of freezer provisioners that offered long-time bulk food financing. This may be partially explained by the tendency of independent freezer provisioners and wholesale frozen food distributors to locate in or near large population centers. Yet, many of the other types of freezer provisioners were located in smaller towns or rural areas.

Following is the percentage of plants financing bulk food purchases, by type of business affiliation, in 1957:

Type of business affiliation	Percentage financing bulk food
Frozen food locker plant	52
Retail grocery store	35
Wholesale meat company	60
Wholesale frozen food distributor	92
Independent freezer provisioner	95
Miscellaneous group	50
Average	55

Another factor was that the relative demand among rural people for large-scale food financing was less because

Table 4. - *Number of plants, by size of town, and percentage of plants, by size of town and indicated years of financing bulk food purchases, 1957*

Size of town	Plants reporting	Years of financing bulk food purchases		
		1 - 4	5 - 8	9 or more
	Number	*Percent*		
Under 2,000	158	31	26	43
2,000-4,999	103	48	36	16
5,000-9,999	87	49	35	16
10,000-24,999	118	54	27	19
25,000-99,999	142	55	36	9
100,000 and over	181	45	48	7
Total or average	789	46	35	19

they produced more of their own food needs than city people. They produced this food seasonally, however, and outside of producing seasons often needed help in financing their food purchases. This in turn helped explain why among those plants offering bulk food financing, a larger proportion in towns of less than 2,000 population had been doing so for a greater length of time than those in larger towns (table 4).

Thus the financing may have been more in the nature of a charge account to accommodate local farmers. This could be explained by the farmer's continual need for food supplies while having a seasonal pattern of income. Thus he could charge his food supplies at the local plant and later, after selling some farm products, pay off his account.

This type of financing seldom required the patron to pay directly for the use of the money involved. The present concept of bulk food financing, as used in freezer provisioning, generally requires the patron to pay directly for use of the money involved. This payment is in the nature of interest that one normally expects to pay whenever he borrows money.

The Pacific Region is generally credited with introducing the idea of financing large quantities of frozen food for home freezer owners (table 5). From there the idea spread to other parts of the country. The South Atlantic Region

Table 5. - *Number of plants, by region, and percentage of plants, by region and indicated years of financing bulk food purchases, 1957*

Region	Plants reporting	Years of financing bulk food purchases		
		1 - 4	5 - 8	9 or more
	Number	*Percent*		
North Atlantic	134	45	44	11
South Atlantic	71	68	22	10
North Central	316	44	33	23
South Central	95	56	31	13
Mountain	63	39	42	19
Pacific	110	34	38	28
Total or average	789	46	35	19

was the last area to actively employ the idea. Industry trends still seem to favor the growth of sound bulk food financing.

Delivery Service

More than half the plants studied provided delivery service. In fact, the proportion furnishing such service paralleled closely those offering financing. When the regional, size-of-town, and type-of-business-affiliation tables for bulk food financing and delivery service are compared, the correlation is close but not quite as precise as for the overall averages. This means some plants financed bulk food purchases without giving delivery service. Others provided delivery but no financing for 60 days or more on bulk quantities of frozen foods.

The percentage of plants providing delivery service, by region, in 1957 follows at top of next column:

Region	Percentage providing delivery
North Atlantic	70
South Atlantic	71
North Central	47
South Central	62
Mountain	54
Pacific	46
Average	54

Following is the percentage of plants providing delivery service, by size of town, in 1957:

Size of town	Percentage providing delivery
Under 2,000	34
2,000-4,999	46
5,000-9,999	53
10,000-24,999	61
25,000-99,999	76
100,000 and over	77
Average	54

Home delivery of frozen food appeals to the homemaker.

The relationship between the two services appears sufficiently close to indicate that any plant contemplating financing food in bulk quantities will need also to examine the advantages and disadvantages of providing delivery service.

The percentage of plants providing delivery service, by type of business affiliation, in 1957 follows:

Type of business affiliation	Percentage providing delivery
Frozen food locker plant	50
Retail grocery store	40
Wholesale meat company	56
Wholesale frozen food distributor	92
Independent freezer provisioner	93
Miscellaneous group	43
Average	54

Advice from Home Economists

Just over one-tenth of the locker and freezer provisioning establishments studied employed home economists. Proportionally greater use of these specialists centered in the North Atlantic and the South Atlantic Regions, the larger towns, and the independent freezer provisioning establishments. These independents affected the regional and size-of-town percentages.

As business increases, more firms will be able to employ specialized help of this kind. The percentage of plants employing home economists, by region, in 1957 follows:

Region	Percentage employing home economists
North Atlantic	28
South Atlantic	22
North Central	8
South Central	12
Mountain	9
Pacific	5
Average	12

The percentage of plants employing home economists, by size of town, in 1957 follows:

Size of town	Percentage employing home economists
Under 2,000	3
2,000-4,999	4
5,000-9,999	10
10,000-24,999	9
25,000-99,999	25
100,000 and over	29
Average	12

Following is the percentage of plants employing home economists, by type of business affiliation, in 1957:

Type of business affiliation	Percentage employing home economists
Frozen food locker plant	8
Retail grocery store	4
Wholesale meat company	12
Wholesale frozen food distributor	38
Independent freezer provisioner	51
Miscellaneous group	18
Average	12

Employment of home economists was limited mostly to large operations, where they could adequately be used to instruct homemakers and others in the proper preparation, storage, and use of frozen foods.

Some organizations employed what they referred to as "food counselors" instead of home economists. They said that professionals too often told homemakers what to eat instead of how to order and use frozen foods. This

A manager shows some of his home economists a new frozen food package that is to be offered.

frequently proved a source of irritation to customers.

Membership Fees Charged

Less than 10 percent of the establishments studied charged membership fees for the privilege of participating in their freezer provisioning program. The percentage of plants charging membership fees, by region, in 1957 follows:

Region	Percentage charging membership fees
North Atlantic	11
South Atlantic	20
North Central	5
South Central	10
Mountain	7
Pacific	5
Average	8

Membership fees, as used here, refer to those fees some establishments charged customers for the right to participate in their freezer provisioning program. The fees were levied only on those people who bought their home freezers elsewhere and then wanted locker and freezer provisioning firms to supply them with frozen foods.

The percentage of plants charging membership fees, by size of town, in 1957 follows:

Size of town	Percentage charging membership fees
Under 2,000	2
2,000-4,999	5
5,000-9,999	7
10,000-24,999	6
25,000-99,999	16
100,000 and over	17
Average	8

The proportion charging membership fees varied by region and size of town. Likewise, those charging such fees were concentrated among independent freezer provisioners and wholesale frozen food distributors.

One of the main reasons advanced for charging such fees was that it helped protect the freezer provisioner's net income, a sizeable portion of which came from the sale of home freezers. By this means people were encouraged to buy a freezer from a freezer provisioner. A life-time membership to the freezer provisioning program was normally included with the purchase. If, however, people wanted the services offered by a freezer provisioner without buying his freezer, many provisioners believed they should pay for them.

Following is the percentage of plants charging membership fees, by type of business affiliation, in 1957:

Type of business affiliation	Percentage charging membership fees
Frozen food locker plant	5
Retail grocery store	0
Wholesale meat company	5
Wholesale frozen food distributor	29
Independent freezer provisioner	46
Miscellaneous	4
Average	8

While a relatively small proportion of the total number of firms studied charged membership fees, almost half the independents did. The idea is only a few years old. Freezer provisioners will need to examine the pros and cons in their particular circumstances before deciding whether or not to use such fees.

The average plant in this survey had sales of $156,000 for 1957. This figure means more when compared with average sales of $26,000 per plant for the entire frozen food locker industry in 1954. This indicates that those plants that had started provisioning home freezers increased their sales potential considerably.

Home Freezer Patrons

Plants reporting served an average of 640 home freezer patrons each. Based on this average, all plants that received questionnaires served an estimated 1.6 million patrons. This meant that approximately one-fourth of the locker and freezer provisioning industry, about 2,500 plants, served almost as many home freezer customers in 1957 as the entire frozen food locker industry, about 10,500 plants, did in 1954. That year's figure was 1.8 million patrons.

Two factors help explain this. First, the trend among locker plants toward serving home freezer customers grew rapidly between 1954 and 1957. Second, this survey included a number of food plan operations which were not included in the earlier survey. The significant point was the strong move within the industry to cater to freezer owners. Even yet, the potential in this area is largely untapped.

Annual Sales

The organizations studied had average sales of $156,000 each in 1957 (figure 4). These sales were composed of 59 percent meat, 17 percent commercial frozen food, and 24 percent home freezers.

A freezer provisioner's representative explaining his program to prospective buyers.

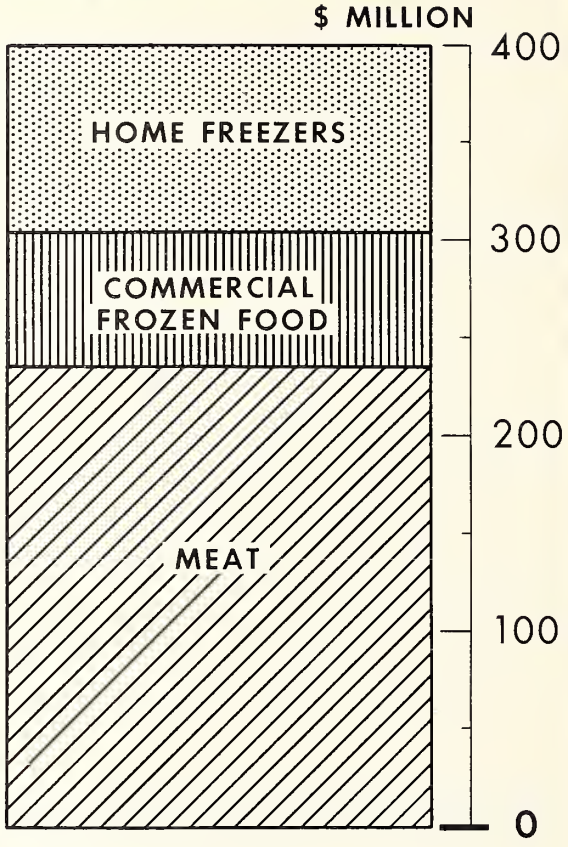
Figure 4

Annual Sales per Plant

SALES	AVERAGE PER PLANT
HOME FREEZERS	$ 37,000
COMMERCIAL FROZEN FOOD	27,000
MEAT	92,000
TOTAL	$ 156,000

1957 DATA FROM 1,433 SELECTED PLANTS

Estimated Total Sales*



*UPPER 1/4 OF THE INDUSTRY

Projected total sales were estimated at nearly $400 million for 1957. This estimate was for the 2,546 plants that received questionnaires. No attempt was made to estimate for the entire industry. The projected total sales of these locker and freezer provisioning plants for 1957 were almost half again as large as the estimated total sales the frozen food locker industry had in 1954, which was $275 million.

Upon observing this comparison, the question immediately arises: What accounted for the big difference? There were three primary reasons. First, more locker plants started selling products instead of depending solely on custom processing. Second, those locker plants that were merchandising back in 1954 increased their annual sales considerably during the next 3 years. Third, a number of food-plan establishments were included in this survey that were not included in the earlier survey. In fact, some of these food-plan establishments did not even exist in 1954.

For those reporting, the average freezer provisioning plant in the North Atlantic Region had average sales of more than twice as much as the average one in the North Central, the Pacific, or the Mountain Region. The difference in sales volume per plant by size of town was even greater. Sales of the average plant located in a city of 100,000 or more population exceeded sales of the

average one in a town of under 2,000 population by more than 4 times.

Following are average sales per plant, by region, in 1957:

Region	Sales
North Atlantic	$285,000
South Atlantic	219,000
North Central	108,000
South Central	187,000
Mountain	130,000
Pacific	127,000
Average	$156,000

Following are average sales per plant, by size of town in 1957:

Size of town	Sales
Under 2,000	$63,000
2,000-4,999	89,000
5,000-9,999	173,000
10,000-24,999	145,000
25,000-99,999	239,000
100,000 and over	329,000
Average	$156,000

As pointed out in previous discussion, pages 7-20, regional and size-of-town data were affected considerably by the types of businesses providing freezer provisioning services therein.

The proportion of plants falling within various specified sales groups, by region, varied widely (table 6). In both the North Atlantic and the South Atlantic Regions over half had sales of $100,000 or more for 1957. Sales per plant averaged larger in those regions and towns where more firms performed more of the various merchandising operations.

Analysis of sales by types of business affiliation also showed that those types with the greater average sales were the same ones that performed more of the various merchandising operations. The most striking example of this was independent freezer provisioners. Although they comprised less than one-tenth of the plants surveyed, they accounted for almost one-fourth of estimated total sales.

The following tabulation compares percentage of plants reporting with percentage of estimated total sales, by type of business affiliation, for 1957:

Type of business affiliation	Plants reporting	Estimated total sales
Frozen food locker plants	75	56
Independent freezer provisioners	8	23
Retail grocery stores	7	4
Wholesale meat companies	4	8
Frozen food distributors	2	5
Miscellaneous	4	4
Total	100	100

Likewise, proportionally more independent freezer provisioning plants performed a larger number of the various merchandising operations, especially those more directly associated with serving home freezer owners, such as financing bulk food purchases, selling home freezers, providing delivery service, and employing home economists.

Meat Sales

The average establishment in this survey had meat sales of $92,000 for 1957. Since all plants did not sell meat, average meat sales per plant were higher -- $99,000 -- when only those selling meat were considered.

The 3 percent not selling meat were department stores and appliance dealers. These establishments handled many details of a food plan such as selling freezers, financing, hiring and training

Table 6. - *Locker and freezer provisioning plants reporting indicated sales volume, by region, 1957*

Region	Sales volume				
	Under $25,000	$25,000 to $49,999	$50,000 to $99,999	$100,000 to $499,999	$500,000 and over
	Percent				
North Atlantic	11	14	20	39	16
South Atlantic	10	12	19	47	12
North Central	26	24	23	23	4
South Central	21	14	19	34	12
Mountain	28	23	24	20	5
Pacific	23	20	23	28	6
Average	21	20	21	29	9

salesmen, collecting, and furnishing leads, but they did not handle meat.

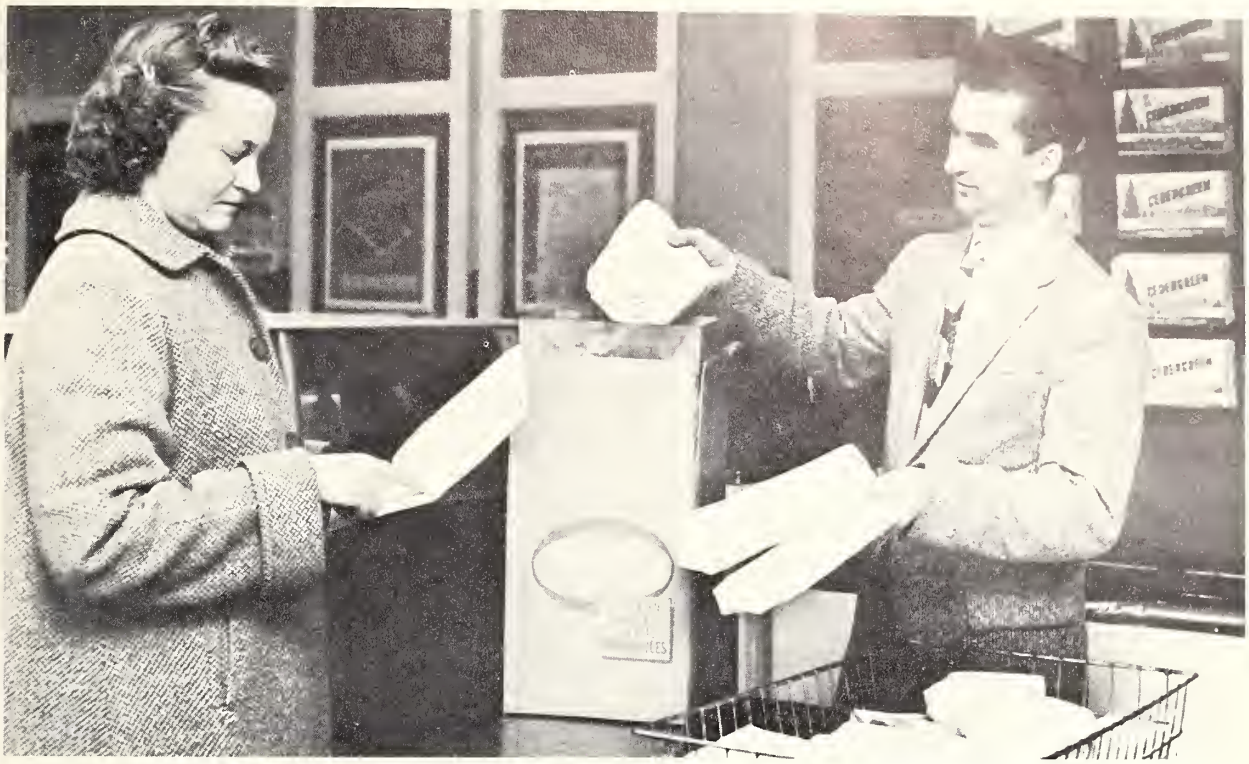
Following are average meat sales per plant, by region, for 1957:

Region	Sales
North Atlantic	$160,000
South Atlantic	118,000
North Central	71,000
South Central	99,000
Mountain	81,000
Pacific	88,000
Average	$92,000

In most freezer provisioning operations, meat plays an important part. Findings of this survey indicate that meat sales accounted for about four-fifths of the combined sales of meat and commercial frozen food. If this same ratio had been applied to the average initial and repeat food orders, meat would have accounted for about $104 and $88, respectively, of the $130 initial order and the $110 repeat order.

Almost three-fifths of the meat sold by plants in this survey was sold directly to home freezer customers in bulk

One of the larger freezer provisioning establishments.



A customer checks packages of meat as they are put into an insulated container.

quantities (figure 5). Another 15 percent was sold at retail through meat counters or cases in the plants. Hence, almost three-fourths of the meat was sold at retail.

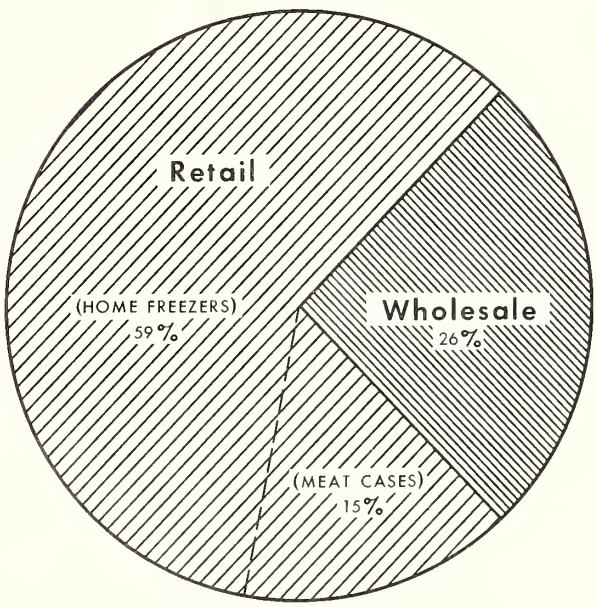
Average meat sales per plant, by size of town for 1957 follow:

Size of town	Sales
Under 2,000	$48,000
2,000-4,999	65,000
5,000-9,999	123,000
10,000-24,999	97,000
25,000-99,999	115,000
100,000 and over	175,000
Average	$92,000

The large proportion of meat sold in bulk quantities to home freezer customers emphasized the importance of this sales outlet for locker and freezer provisioning establishments. It also highlighted the valuable service these establishments provided for home freezer owners.

Figure 5

Meat Sales



1957 DATA FROM 1,433 SELECTED PLANTS

Commercial Frozen Food Sales

The average volume for commercial frozen food sales among all plants included in the survey was $27,000 for 1957. Not all plants in the survey sold commercial frozen food. In fact, almost one-fourth of them did not. In this group were some department stores, appliance dealers, and some relatively small plants that indicated they could not profitably handle commercial frozen food in competition with chain grocery stores in their trade areas. Commercial frozen food sales per plant for those plants (77 percent) selling them averaged about $35,000.

Average commercial frozen food sales per plant for all establishments studied, by region, for 1957 follow:

Region	Sales
North Atlantic	$48,000
South Atlantic	31,000
North Central	20,000
South Central	24,000
Mountain	23,000
Pacific	14,000
Average	$27,000

Per plant sales in the North Atlantic Region ranked highest with an average of $48,000. This was almost double the overall average. Plants in towns of 2,000 or more population had average sales per plant of from almost twice to over 6 times as much as firms in towns of under 2,000 population.

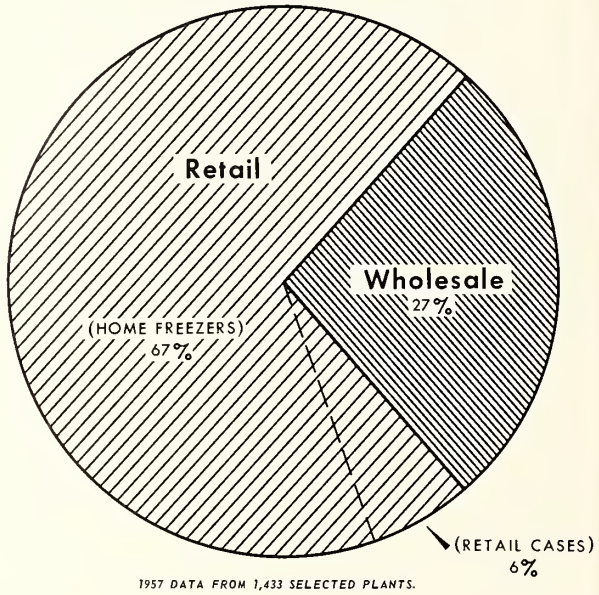
Following are average commercial frozen food sales per plant, by size of town, for 1957:

Size of town	Sales
Under 2,000	$8,000
2,000-4,999	13,000
5,000-9,999	22,000
10,000-24,999	20,000
25,000-99,999	45,000
100,000 and over	49,000
Average	$27,000

Approximately two-thirds of the commercial frozen food was sold in bulk quantities to home freezer owners (figure 6). Although the majority was sold at retail, the amount sold at wholesale allowed locker and freezer provisioning plants to make more adequate use of their facilities, equipment, and labor.

Figure 6

Commercial Frozen Food Sales



1957 DATA FROM 1,433 SELECTED PLANTS.

Home Freezer Sales

One-third of the organizations surveyed sold home freezers. Those selling freezers sold an average of 190 per plant. Based on this average, it was estimated that approximately one-third of the 2,500 plants that received questionnaires sold about 165,000 units during 1957.

According to the January 1958 issue of Electrical Merchandising, the domestic sales of home freezers amounted to about 900,000 units for 1957. On the basis of this survey, it would appear that

about one-third of the plants receiving questionnaires sold almost one-fifth of the total number of freezers sold in the United States during 1957.

Average freezer sales per plant for all plants in the survey were $37,000. When average freezer sales were calculated on the basis of only those plants selling them, the average per plant jumped to $112,000.

Following are average home freezer sales per plant for all firms studied, by region, for 1957:

Region	Sales
North Atlantic	$77,000
South Atlantic	70,000
North Central	17,000
South Central	64,000
Mountain	26,000
Pacific	25,000
Average	$37,000

Average freezer sales per plant seemed to follow the general sales pattern discussed earlier. Higher average freezer sales appeared in plants located in the North Atlantic and the South Atlantic and the South Central Regions. Plants located in larger towns also had higher average freezer sales.

Average home freezer sales per plant, by size of town, for 1957 follow:

Size of town	Sales
Under 2,000	$7,000
2,000-4,999	11,000
5,000-9,999	28,000
10,000-24,999	28,000
25,000-99,999	79,000
100,000 and over	105,000
Average	$37,000

Comparison Between Plants Selling and Those Not Selling Home Freezers

A much greater proportion of the plants selling home freezers provided delivery service, employed home economists, and charged membership fees. On the other hand, plants not selling freezers showed a much greater proportion of their group slaughtering livestock for resale.

Following is a comparison of plants selling with those not selling home

This spacious showroom serves as a display area for home freezers. It is also used for group meetings and demonstrations.

freezers, by merchandising operation performed, in 1957:

Type operation	Plants selling freezers	Plants not selling freezers
	Percent	
Sold packer meat	89	83
Provided delivery	84	43
Sold meat net-weight	40	41
Employed home economists	33	2
Produced portion-control meats	23	13
Charged membership fees	22	1
Sold dry groceries	19	17

The four areas of selling packer meat, selling meat net-weight, producing portion-control meats, and selling dry groceries showed no important difference between plants selling freezers and those not selling them.

When plants selling freezers were compared with those not selling them in terms of the number of home freezer customers served, the contrast was striking. Plants selling freezers served an average of about 850 home freezer customers during 1957. During the same year, those not selling freezers served an average of only about 475.

Home freezer sales accounted for some 44 percent of average plant sales for those selling freezers. Meat sales accounted for the next largest share - 35 percent. Commercial frozen foods accounted for the least amount - 21 percent.

The big income producer in plants not selling home freezers was meat, which accounted for over 80 percent of average plant sales. Commercial frozen food sales contributed about 17 percent.

Whether home freezers were sold or not had an important effect on average plant sales as shown in the next tabulation:

Type sales	Average sales: Plants selling freezers	Average sales: Plants not selling freezers
Meat	$88,000	$85,000
Commercial frozen food	53,000	18,000
Home freezers	112,000	000
Plant average	$253,000	$103,000

Since there was little difference between the volume of meat sales in the average plant selling freezers compared with the one not selling freezers and such a major difference in commercial frozen food sales, it led one to conclude that customers of the latter group of firms had to buy part or all of their commercial frozen food from other sources.

This conclusion had further support in that the plants selling home freezers probably bought their commercial frozen foods in larger quantities and therefore obtained better purchase prices. This allowed them to compete successfully with chain grocery stores. Some relatively small plants indicated they could not profitably sell commercial frozen food in competition with such stores.

Establishments selling freezers had average sales almost $2\frac{1}{2}$ times as large as those not selling freezers. Freezer sales accounted for the bulk of this difference.

Comparison Between Financing and Non-Financing Plants

In all operations except livestock slaughtering, a larger proportion of the firms that financed food performed the various merchandising operations than those that did not finance food.

These comparisons are shown in the following tabulation:

Type operation	Plants financing food	Plants not financing food
	Percent	
Sold packer meat	88	72
Provided delivery	63	29
Sold home freezers	53	13
Sold meat net-weight	41	35
Slaughtered livestock for resale	22	34
Produced portion-control meats	22	7
Employed home economists	21	1
Sold dry groceries	19	15
Charged membership fees	13	1

The comparisons indicated that there was a close relationship between certain operations and financing food. This was noticeable for such operations as providing delivery service, selling home freezers, producing portion-control meats, employing home economists, and charging membership fees.

These same operations were performed by a small proportion of the plants that did not finance food. Those not financing bulk food purchases showed a substantially higher proportion slaughtering livestock for resale.

As one would expect, those that financed food purchases had larger average food sales. This held for both meat and commercial frozen food sales, shown as follows:

Type sales	Plants financing food	Plants not financing food
Meat	$115,000	$79,000
Commercial frozen food	32,000	6,000

Firms that financed food had meat sales almost half again as large as those not financing. Commercial frozen food sales were more than five times as great. Since those that financed food had such large average sales of commercial frozen food, it implies that they were able to buy in sufficiently large quantities to get quantity discounts and thus compete successfully with chain grocery stores in their areas.

Firms financing bulk food purchases had more than twice as many home freezer customers per plant as those that did not finance food - 772 compared with 328. This indicates a favorable response among homemakers for bulk food financing and related services.

Observations and Conclusions

Information presented in this report supports the premise that freezer provisioning is an expanding industry. Further growth appears most likely among those establishments that offer a variety of services and build customer confidence. There is no one magic combination that will meet the needs of all freezer provisioners. Instead, it will require some initiative on the part of operators to analyze their potential market and adopt a program that will serve this market.

The convenience of freezer provisioning and frozen food preparation will probably attract the attention of even more homemakers. This is particularly true because of the increased number of married women entering the labor force. Faced with the task of running a household and holding down a full-time job outside the home, the

homemaker is seeking ways to lessen her household chores. She often is willing to exchange money for convenience. It cannot be emphasized too strongly that convenience, accompanied by nutrition and economy, is the mainspring of freezer provisioning and underlies the whole development of frozen foods.

Nevertheless, the speed with which a homemaker will part with her money depends upon the need she feels for the object received in exchange. This simply means homemakers have to be sold on the merits of freezer and frozen food living. The volume of business in the various freezer provisioning establishments will grow in relationship to how well they "sell" the convenience and excellence of this way of living.

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